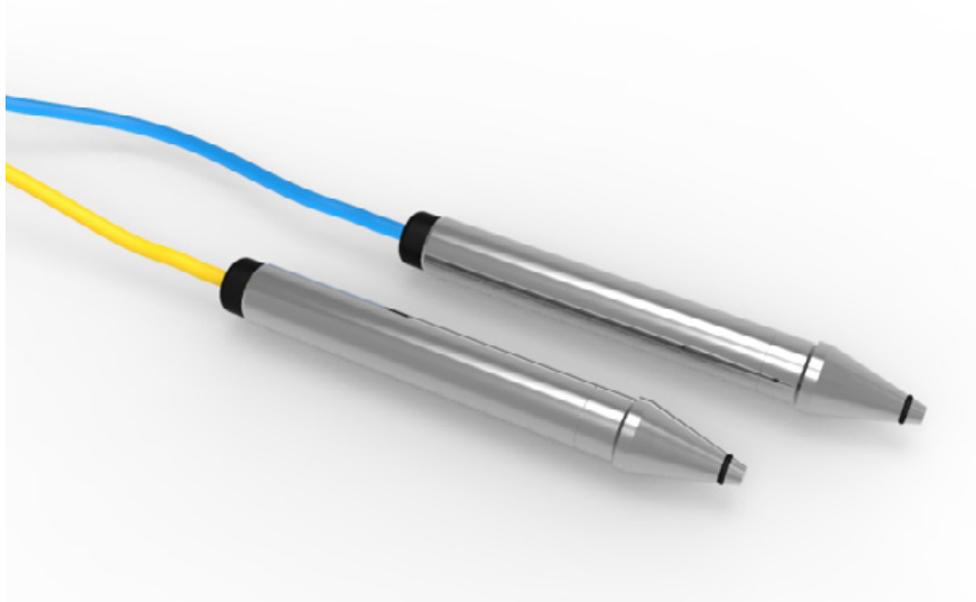


PK45C

REMOVABLE PRESSURE
TRANSDUCERS

PIEZOMETERS





REMOVABLE PRESSURE TRANSDUCERS

The removable pressure transducer is designed to measure pore-water pressure through a special Casagrande filter tip.

This unique design is especially suitable for long-term monitoring since it allows the instrument to be withdrawn for calibration checks.

The removable pressure transducer can be supplied with either vibrating wire or piezo-resistive technology.

APPLICATIONS

- Long term monitoring
- Suitable in lightning-prone areas (since it can be replaced)
- Dams and fill embankments
- Measurement of ground pore pressure
- Landslides monitoring
- Natural or cut slope sites

FEATURES

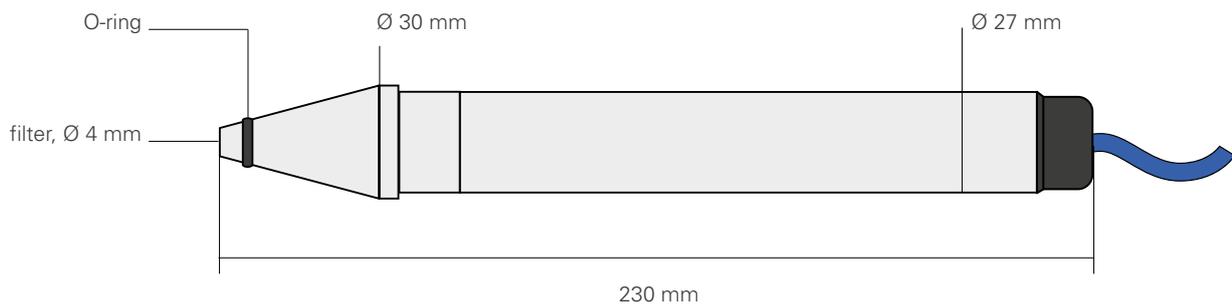
- Removable for further calibration and check
- Cable length does not affect reading
- Built-in surge protection and temperature sensor (vibrating wire only)
- If removed, Casagrande continue to works with manual water level indicator

CE *Meet the essential requirements of the EMC Directive 2014/30/UE*

TECHNICAL SPECIFICATIONS

	VIBRATING WIRE		PIEZO-RESISTIVE	
	REMOVABLE PRESSURE TRANSDUCER		REMOVABLE PRESSURE TRANSDUCER	
APPLICATION	Pore pressure monitoring directly into Casagrande filter unit		Pore pressure monitoring directly into Casagrande filter unit	
MODEL	0PK45C20000	0PK45C50000	0P252C00200	0P252C00500
Range	0 - 200 kPa 0 - 29 psi	0 - 500 kPa 0 - 73 psi	0 - 200 kPa 0 - 29 psi	0 - 500 kPa 0 - 73 psi
Overpressure	2 x range		1.3 x range	
Sensitivity	0.025% FS		0.01% FS	
Linearity ⁽¹⁾	< ±0.40% FS	< ±0.40% FS	< ±0.25% FS	< ±0.25% FS
Total Accuracy ⁽²⁾	< ±0.25% FS	< ±0.25% FS	< ±0.20% FS	< ±0.15% FS
Signal output	frequency (VW), resistance (T)		4 - 20 mA (current loop)	
Electric supply	-		12 -24 V DC	
Thermal zero shift	0.01 ÷ 0.03 % FS /°C		0.00025 % FS /°C	
Electric insulation	> 50 MΩ		4 kV	
Temp. operating range	-20 to +80 °C		-10 to +55 °C	
Temperature sensor	thermistor		thermistor (on request)	
Material	stainless steel		stainless steel	
Body diameter	Ø 27 mm (1.1")		Ø 27 mm (1.1")	
FILTER UNIT				
Type	stone, Ø 4 mm (0.16")		stone, Ø 4 mm (0.16")	
Material	stainless steel		stainless steel	
Pore size	40/50 µm		40/50 µm	
CABLE				
Signal cable	0WE104K00ZH (LSZH jacket) 0WE104K00PV (PVC jacket)		0WE102KEOZH (LSZH jacket)	
Max cable length to logger ⁽³⁾	1000 m (for more information see FAQ#77)		1000 m (for more information see FAQ#77)	

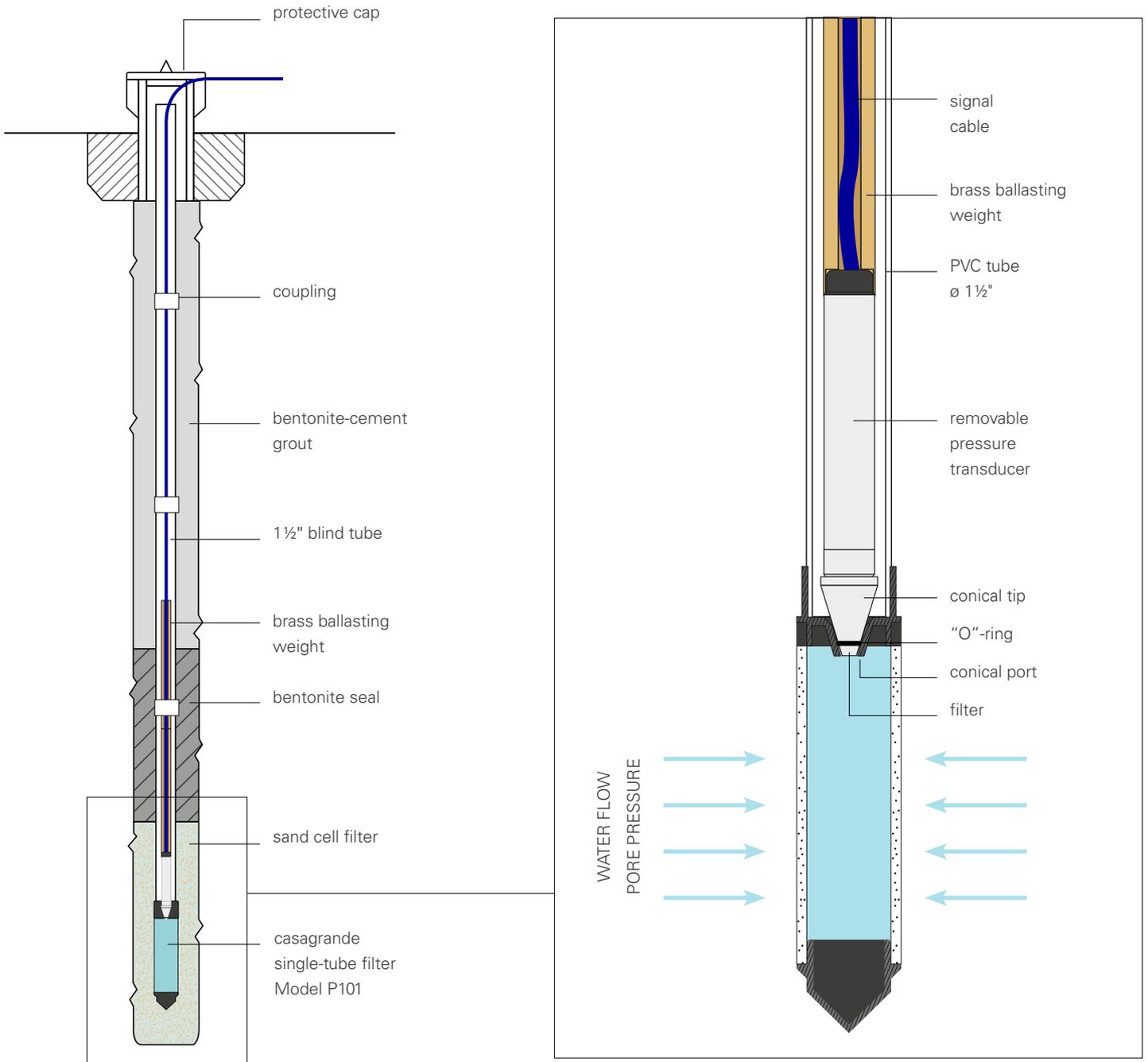
(1) including hysteresis (2) including linearity, hysteresis and repeatability, calculated with 3rd degree polynomial (3) refer to FAQ section of Sisgeo website: www.sisgeo.com/faq



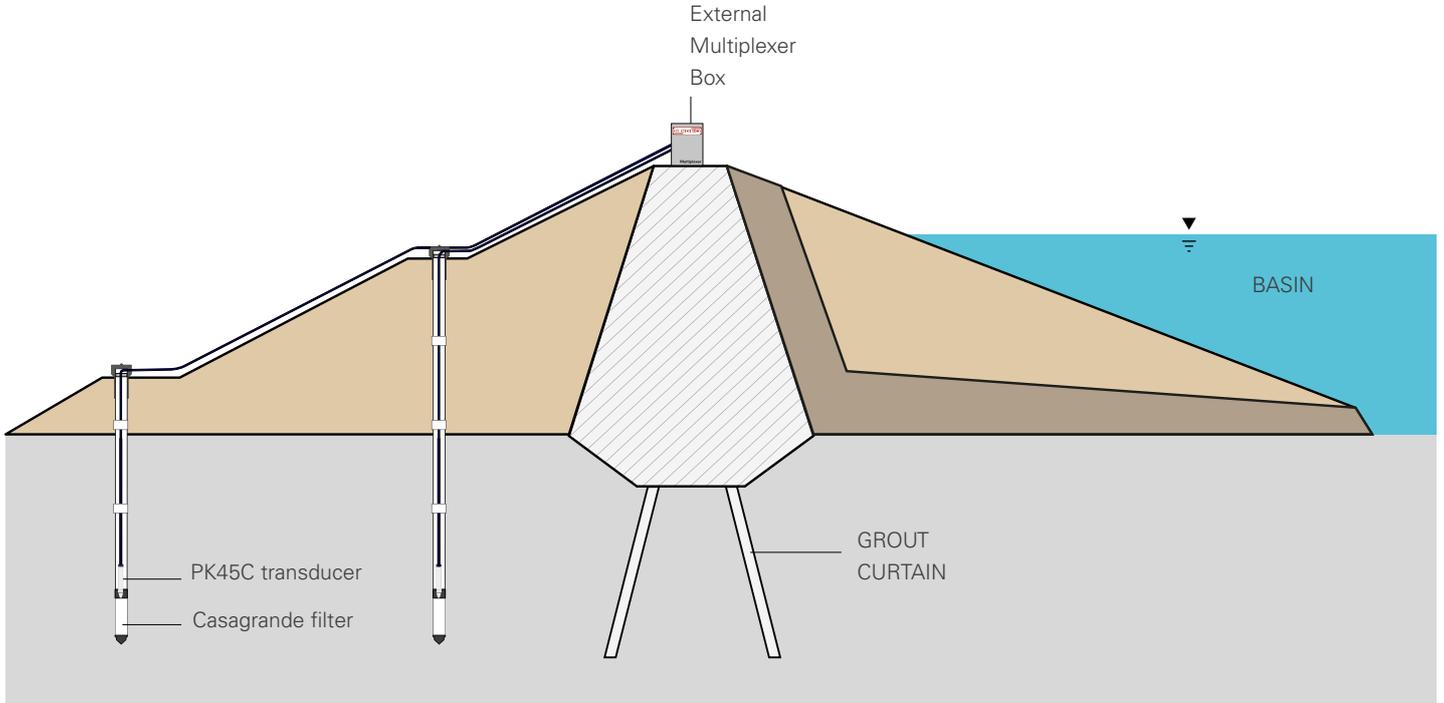
WORKING PRINCIPLE

The tip of the removable pressure transducer is designed to mate with the conical port of the P101 Casagrande filter. A seal is maintained via an o-ring in the tip and ballasting weights slipped onto the signal cable. A small orifice in the tip allows pore-water pressure to act on the diaphragm inside the pressure transducer.

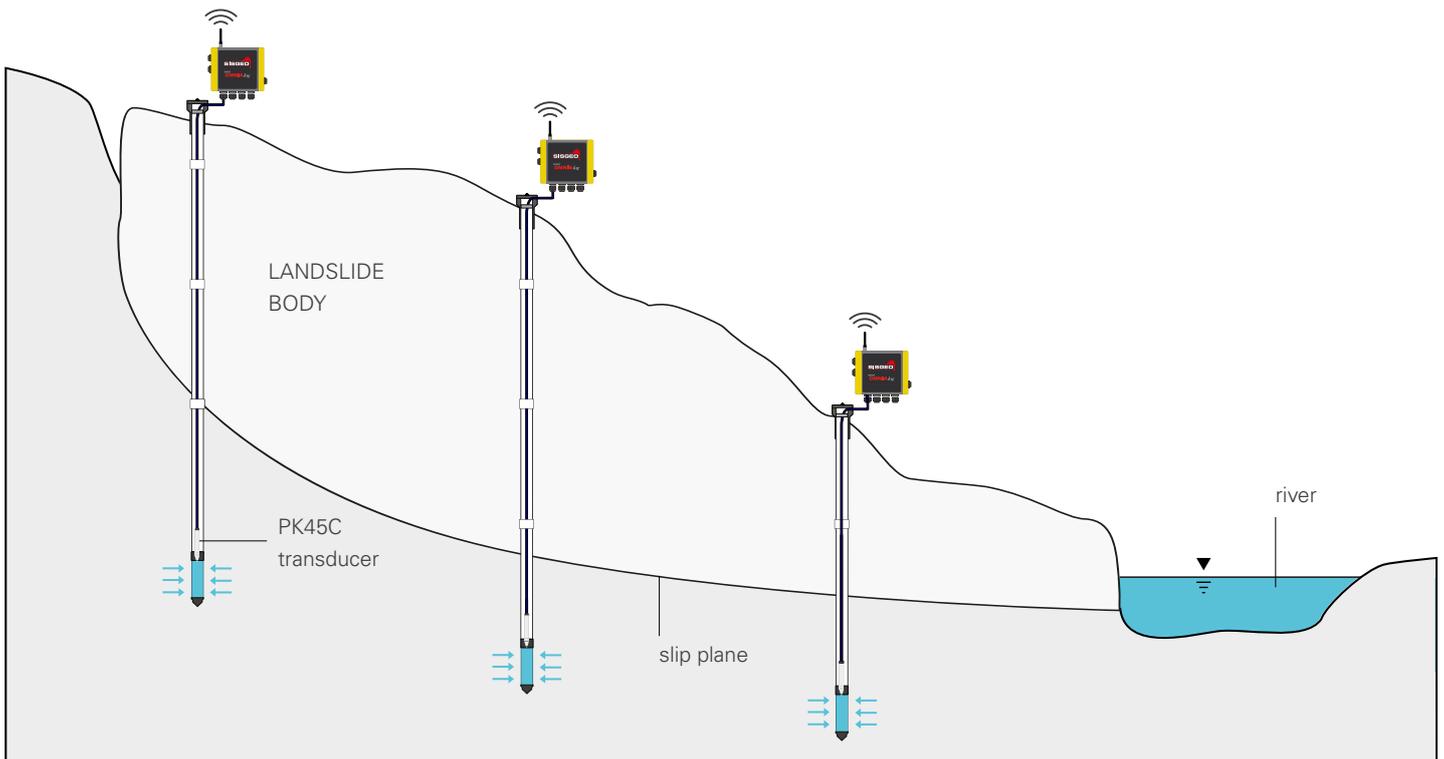
The P101 Casagrande filter tip and riser pipe are installed in the normal way. The transducer, with brass ballasting weights, is lowered to mate with the port in the P101 filter. **The transducer can be removed for calibration checks or replacement.**



PORE PRESSURE MONITORING
IN EMBANKMENT DAM'S FOUNDATION



UP-LIFT PRESSURE MONITORING
IN LANDSLIDE APPLICATION



ACCESSORIES AND SPARE PARTS

LSZH 4 WIRE CABLE OWE104K00ZH

Electrical cable with 2 pairs of 22 AWG wire and LSZH jacket. External diameter 7.4 mm. Rated for -30° to + 80°C.

PVC 4 WIRE CABLE OWE104K00PV

Electrical cable with 2 pairs of 22 AWG wire and PVC jacket. External diameter 7.6 mm. Rated for -30° to + 80°C.

LSZH 2 WIRE CABLE OWE102KE0ZH

Electrical cable with 2 wires (20 AWG), Kevlar stress member and LSZH jacket. External diameter 7.7 mm. Rated for -30° to + 80°C.

PROTECTIVE PIEZOMETER CAP OP100CH1000

Protective lockable cap for standpipe or Casagrande piezometers with data plate and survey pin.

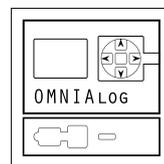
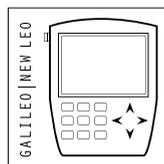
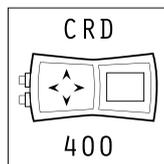


CABLE SPLICING KIT OEGSMOK0000

Splice kits are used when cables must be repaired or extended. Each splice kit includes circuit boards, butt connectors, plastic protection tubes, and the two-part epoxy resin kit for waterproofing.



READABLE BY



Refer to separate datasheets for further information.

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